

VERB RAISING AND CASE CHECKING: A MINIMALIST APPROACH

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1. Introduction

Korean has two types of negation constructions--the so called Long-form Negation Construction (LNC) in which the negator follows a main verb nominalized by a connective ending (CE) *-ci* and precedes the dummy verb *ha* 'do', and a Short-form Negation Construction (SNC) in which the negator precedes the main verb. These two types are illustrated in (1a) and (1b) respectively.

- (1) a. Halmeni-kkeyse telebi-lul po-si-ci ani hay-ess-ta. (LNC)
 grandmother-NOM+HON T.V.-ACC watch-HON-CE not do-PAST-DECL
 'Lit.) Grandmother did not do watching the T.V.'
 'Grandmother did not watch the T.V.'
- b. Halmeni-kkeyse telebi-lul ani po-si-ess-ta. (SNC)
 grandmother-NOM+HON T.V.-ACC not watch-HON-PAST-DECL
 'Lit.) Grandmother not watched the T.V.'
 'Grandmother did not watch the T.V.'

In the LNC, a nominalized verb can have an Accusative Case marker but not a Nominative Case marker, whereas a nominalized adjective can be either Accusative or Nominative, as exemplified in (2).

- (2) a. Halmeni-kkeyse telebi-lul po-si-ci-lul/*ka
 grandmother-NOM+HON T.V.-ACC watch-HON-CE-ACC/*NOM
 ani hay-ess-ta.
 not do-PAST-DECL
 'Grandmother did not watch the T.V.'
- b. Halmeni-kkeyse yeppe-si-ci-lul/ka ani hay-ess-ta.
 grandmother-NOM+HON pretty-HON-CE-ACC/NOM not do-PAST-DECL
 'Grandmother is not pretty'

In this study, following Chomsky's (1993) minimalist approach, I will argue that a verb with a Tense feature overtly raises over NEG to the Tense position in both the SNC and the LNC to have its Tense feature checked. I will also account for how a nominalized verb can have only an Accusative Case marker as shown in (2a), whereas a nominalized adjective can have either an Accusative or Nominative Case marker as shown in (2b). For this study I assume that lexical items are selected with inflectional and Case features from the lexicon as suggested by Chomsky (1993). Also I assume that in Korean Tense has a strong V-feature and a weak N-feature, and AGR has a weak V-feature and weak N-feature.¹

2. Different Views of NEGP in Korean

Chomsky (1993) argues, adapting Pollock's (1989) Extended IP structure, that NEGP is present between TP and AGRoP in both English and French Negation Constructions. Chomsky (1993) argues that the English main verb does not overtly move across NEG, since English AGR has a weak V-feature; the French main verb on the other hand overtly moves across NEG in the syntax, since French AGR has a strong V-feature. If NEGP is present in Korean between TP and VP as in English and French (Pollock 1989, Chomsky 1989, 1993), we can take the view that in the SNC the main verb overtly raises over NEG, whereas in the LNC not the main verb but the dummy verb *ha* 'do' overtly raises over NEG, as illustrated below.

- (3) a. [TP [NEGP [vp t_i] NEG] V_i] (SNC)
 b. [TP [NEGP [VP [V-ci] t_i] NEG] ha_i (do)] (LNC)

Let us review different positions on the existence of NEGP, first, as related to the argument for verb movement in Korean Negation Constructions. Yoon (1990) suggests that NEGP is present between TP and AGRP with NEG having scope over the subject as well as the object position in Korean Negation Constructions. Han (1993) claims, however, that NEGP is found neither in the SNC nor in the LNC of Korean, and that the negative morpheme in both types of Negation is an adverb. Cho (1993) claims that there is no NEGP in the SNC, but that there is in the LNC. These claims against NEGP are partly based on the view that the SNC with a quantifier as in (4) is unambiguous, with the QP having wide scope over the negator, whereas the LNC with a quantifier is ambiguous.

- (4) a. Motun salam-i an ttwui-ess-ta (SNC)
 all people-NOM not run-PAST-DECL
 'No one ran.'
 b. John-i motun salam-ul an manna-ss-ta
 -NOM all people-ACC not meet-PAST-DECL
 'John met no one.'
 (5) a. Motun salam-i ttwui-ci an-h-ass-ta (LNC)
 all people-NOM run -CE not-do-PAST-DECL
 'No one ran.'
 'It is not the case that everyone ran.'
 b. John-i motun salam-ul cohaha-ci an-h-nun-ta
 -NOM all people-ACC like -CE not-do-PRES-DECL
 'John likes no one.'
 'It is not the case that John likes everyone.'

In criticism of Yoon's analysis of the Korean Negation Constructions, Han claims that the postulation of NEGP wrongly predicts that the SNC with a quantifier has a reading with NEG having wide scope over the quantifier phrase and that the LNC with a quantifier phrase has only one reading with NEG having wide scope over the quantifier phrase as in the SNC, since the quantifier phrase falls within the domain of NEG in both the SNC and the LNC. He claims that the reading of the SNC with a quantifier phrase like (4) can be correctly captured by assuming that the negative morpheme is an adverb negating a verb, whereas in the LNC the scope of the

negator is determined by interaction with the verbal nominalizer *-ci*, which he assumes is the scope marker of a negator.

Cho agrees with Han's adverbial analysis of the SNC, but he claimed, contra Han, that NEGP is present in the LNC. He makes the distinction between the SNC and the LNC to account for the scopal asymmetry between the SNC and the LNC. He claims that the ambiguity of the LNC with a quantifier can be accounted for in terms of scopal interaction between NEG and a QP after Quantifier Raising at LF. If a QP adjoins to VP under NEGP, NEG has wide scope over the QP and if a QP adjoins to IP, the QP has wide scope over NEG in the LNC.

The claims against NEGP are also based on the view that constructions like (6) and (7), which include a connector *ko*, are a kind of coordination construction, as they consider *ko* to be like English *and*.

- (6) *_[NEGP]John-i chayk-ul sa-ci an]-ko [_[NEGP]Mary-ka kongchayk-ul sa-ci
 -NOM book-ACC buy-CE not-CONJ -NOM notebook-ACC buy-CE
 an]-hay-ess-ta
 not-do-PAST-DECL
 'John did not buy a book and Mary did not buy a notebook.'

Han claims that the postulation of NEGP in Korean cannot explain why coordination between two NEGPs is not allowed. He claimed that the coordination between two NEGPs as in (6) would be possible if NEGP were present in Korean, taking the ungrammaticality of (6) to be a piece of supporting evidence for his claim against the postulation of NEGP in Korean Negation Constructions. Cho claims, under the assumption that the SNC (7) is a VP coordination construction, that it is impossible to account for the reason that the negative morpheme in the second conjunct cannot negate the first conjunct, given that NEGP is present above the VP, since NEG commands and has scope over both the first and second conjuncts.

- (7) John-i [swul-ul masi]-ko tambay-lul ani phiwu]-ess-ta
 -NOM alcohol-ACC drink-CONJ cigarette-ACC not smoke-PAST-DECL
 'John drank alcohol but did not smoke cigarettes.'

Cho claims that it is possible to account for this, however, if the negative morpheme is an adverb negating the verb only, generated under V, since in that case the negative morpheme does not have scope over the first conjunct because it does not command the first conjunct.

I will now discuss some problems with these claims. First, Han and Cho both assume the SNC with a quantifier as in (4) can have only one reading where the QP has wide scope over the negative morpheme--'No one ran.' However, sentences like (4) are in fact ambiguous with two readings such as 'No one ran.' and 'Not all people ran.' (Jung 1992). To prove this fact, let us consider what happens when the SNC (4) is conjoined with another sentence meaning 'Some people ran.'

- (8) Motun salam-i an ttwui-ko myech salam -i ttwui-ess-ta
 all people-NOM not run-CONJ some people-NOM run-PAST-DECL
 'Not all people ran and some people ran.'

No contradiction arises here, showing that the SNC with a quantifier allows a reading in which the negator has wide scope; the SNC is thus inherently ambiguous, even though this is not the preferred reading if context doesn't require it. Therefore, Han's and Cho's claim that the negative morpheme in the SNC is an adverb, based on the assumption that the SNC with a quantifier allows only the reading in which the quantifier has wide scope over the negator, is not tenable.

Second, neither of the arguments against NEGP based on the coordination constructions are tenable. Yi (1994) argues that the Korean connector *ko* is not exactly like the English coordinate conjunction *and*, and that structures with conjunction of two categories with *ko* like (6) and (7) are not coordination, but adjunction structures. This argument is based on the fact that scrambling, right and left dislocation, *wh*-movement at LF are all possible out of *ko*-constructions, whereas movement out of coordination structures is not allowed. If they are not coordination constructions but adjunction constructions where CP is adjoined to VP or IP as Yi (1994) suggests, they cannot constitute evidence to support Han's and Cho's claim against NEGP in Korean Negation Constructions. Under the assumption that constructions (6) and (7) have an adjunction structure the ungrammaticality of (6) can be ascribed to the failure of V-feature of Tense in the adjunct CP to be checked off due to the lack of a dummy verb *ha* that can carry a Tense feature and check off the V-feature of Tense. Also the scope of NEG in (7) can be accounted for without a problem, since the adjunct CP, adjoined to the second clause, can be out of the scope of the NEG of the matrix clause. Cho's claim that the SNC does not contain NEGP, whereas the LNC does, raises another problem: why is there such a distinction in the nature of the negative morpheme *ani* between the SNC and the LNC? and what prevents the generation of NEGP in the SNC if NEGP is present in the LNC? It seems very difficult to find a principled syntactic way to block the generation of NEGP in the SNC without an adhoc stipulation.

Finally, although Han and Cho analyze the negator in the Negation Constructions as an adverb, it does not act like an adverb. Takahashi & Whitman (1992) point out that while the plural marker *-tul* attaches to adverbs, in plural copying contexts (Song 1975, Kuh 1987), it cannot attach to *ani* in the Negation Construction, as shown in (9)

- (9) a. cal-tul hay-ess-ta.
 well-PL do-PAST-DECL.
 '(You all) did well.'
 b. *ani-tul hay-ess-ta
 cannot-PL do-PAST-DECL
 '(We all) did not do (it).'

Delimiters such as *-to* 'even/also' attach to adverbs, but do not occur with *ani*, as shown in (10).

- (10) a. Mary-ka elyewun nolay-lul cal-to pulu-n-ta.
 -NOM difficult song-ACC well-also sing-PRES-DECL
 'Mary sings a difficult song quite well.'
 b. *Mary-ka elyewun nolay-lul ani-to pulu-n-ta.
 -NOM difficult song-ACC not-also sing-PRES-DECL
 'Mary does not (even) sing a difficult song.'

Jung (1993) argues, too, that the negative morpheme *ani* in the Negation Construction behaves differently from adverbs.

- (11) a. Yenghi-ka ppalli ku chayk-ul ilk-ess-ta.
 -NOM fast the book-ACC read-PAST-DECL
 'Yenghi read the book fast.'
 b. *Yenghi-ka ani ku chayk-ul ilk-ess-ta.
 -NOM not the book-ACC read-PAST-DECL
 'Yenghi did not read the book.'

Jung argues that if the negative morpheme were an adverb like *ppalli* 'fast', it should be able to occur in the same position as the adverb before the object *ku chayk-ul* 'the book'. As (11b) shows, however, the negative morpheme in the Negation Construction cannot occur in that position. Jung takes the ungrammaticality of (11b) to suggest that the canonical position of the negative morpheme is different from that of adverbs.

Takahashi & Whitman (1992) argue that the negative morpheme *ani* is a functional head and not affixal. They argue that the fact that the negative morpheme *ani* cannot occur as a main predicate and does not appear with tense or other inflectional suffixes indicates that *ani* is not an inflectional stem but a functional head. Also, the fact that with the uncontracted form of the negative morpheme *ani* voicing may be suspended in slow or careful speech indicates that *ani* is not an affix internal to the same word as the verb, since medial obstruent voicing is obligatory in phonological word-internal position.

Takahashi & Whitman (1992) and Jung (1992) argue that the Korean negative morpheme *ani* in the Negation Constructions occupies the position of an independent head NEG projecting NEGP. They agree on the view that in the SNC the main verb moves across NEG, whereas in the LNC not the main verb but the dummy verb does. However, they differ on how to account for verb movement in the negation constructions. Takahashi & Whitman assume that the dummy verb *ha* is inserted like the English auxiliary *do*, whereas Jung assumes that it is base-generated between NEGP and the nominalized predicate phrase, arguing that it is different from the English auxiliary, since it can assign Accusative Case to the nominalized predicate phrase it dominates. While Jung assumes that the NEG in both the SNC and LNC are of the same type, Takahashi & Whitman assume that NEG in the SNC is a functional category, whereas NEG in the LNC is a lexical category. They make such a distinction so that they can account for the fact that the main verb in the SNC raises over NEG, whereas the main verb in the LNC does not by using Baker & Hales' (1990:292) definition of 'potential antecedent governor for X⁰'.² Jung assumes that the Korean negative morpheme *ani* occurs in SPEC of

NEGP, assuming that SPEC of NEGP is an A'-position branching rightward. She claims that the main verb in the SNC and the dummy verb in the LNC raise to NEG before raising to higher functional categories. Kim (1993) made an analysis of the Korean Negation Constructions in the framework of a minimalist approach, suggesting that in the SNC the verb overtly moves across the negator due to the strong V-feature of AGR and in the LNC the verb does not due to the weak V-feature of AGR and *ha*-support like the English *do*-support occurs to support stranded inflectional suffixes.

Those accounts deal with verb movement in the Korean Negation Constructions adequately. However, it will be better, if possible, to avoid Takahashi & Whitman's assumption of the dual nature of NEG and Kim's assumption of the dual strength of the V-feature of AGR. Jung's assumption that SPEC of NEGP is an A'-position occupied by a negative operator may have a problem in accounting for the ambiguity of Negation Constructions with a quantifier. It is because the negative morpheme, being an A'-operator, blocks A'-binding of the variable of a quantifier after QR at LF in accordance with the Locality Requirement suggested by Aoun & Li (1993:187), which states that 'a variable, if it is subject to the Locality Requirement, must be bound by an A'-binder α within the minimal maximal category containing α and the variable'. Also, it is not clear how they account for Case marking on the nominalized predicate in the Negation Constructions. In the next section, I will suggest an alternative analysis of the Negation Constructions in the framework of the minimalist approach to account for the behavior of verbs and the Case marking on the Nominalized predicate in them, avoiding the problems found in the other analyses.

3. An Alternative Analysis: A Minimalist Approach

In the minimalist program for linguistic theory, Chomsky (1993) attempts to eliminate unnecessary hypotheses within a grammatical theory in order to increase its explanatory power. He suggests that D-structure and S-structure be removed, arguing that the interface levels PF & LF are the only significant linguistic levels, where conditions on representations such as Binding Theory, Case Theory, Theta Theory, etc. hold. In the minimalist program both Nominative and Accusative Case are uniformly assigned under the SPEC-head relation (NP, AGR) in unified X-bar theoretic terms. Chomsky assumes, however, that Case properties depend on characteristics of T(ense) and the V head of VP. Furthermore, he assumes that T raises to AGRs, and V to AGRo, forming (12a) and (12b) respectively:

- (12) a. [AGR T AGR]
 b. [AGR V AGR]

It is assumed that the complex formed by the raising of T and V includes the features of AGR like person, gender, number and the case feature provided by T and V.

To insure a match in Case and agreement features between NP (DP) and V, Chomsky (1993) suggests a Checking Theory, where lexical items are drawn from

the lexicon with all of their morphological features like Case and other agreement features. Functional categories T and AGR have such morphological features as V-features and N-features. Under the Checking Theory INFL disappears if the features of V and INFL match. If the features of V and INFL conflict, INFL remains at LF resulting in the crash of the derivation (ungrammaticality) (Chomsky 1994:9). Strong features of INFL, which are assumed to remain at LF, must be checked off by the inflectional features of a lexical item before SPELL-OUT, which is an operation that converts the morphological features of a lexical item into phonologically interpretable form. Weak features, which are assumed to be eliminable at LF, must be checked off for derivational convergence at LF.

3.1. Verb Movement

Even though I do not agree with Takahashi & Whitman (1992) and Jung (1992) in how to account for verb movement in the Korean Negation Constructions, I agree with them on the view that the Korean negative morpheme in the Negation Constructions is not an adverb and that it occurs in NEG position. Under the view that NEGP is present in the Korean Negation Constructions, I suggest that in the SNC the main verb overtly raises over NEG to Tense position, whereas in the LNC the main verb does not overtly raise over NEG to Tense position but the dummy verb does.

- (13) a. Halmeni-kkeyse telebi-lul t_i ani po-si-ess-ta (SNC)
 grandmother-NOM+HON T.V.-ACC not watch-HON-PAST-DECL
 'Grandmother did not watch the T.V.'
- b. Halmeni-kkeyse telebi-lul po-si-ci t_i ani hay-ess-ta (LNC)
 grandmother-NOM+HON T.V.-ACC watch-HON-CE not do-PAST-DECL
 'Grandmother did not watch the T.V.'

I suggest that the reason the main verb in the Korean LNC does not overtly move across NEG is due to the Greed Principle (Chomsky 1993), since it does not have any Tense feature, and Korean AGR has a weak V-feature. The main verb in the LNC does not have a Tense feature because it is nominalized with a suffix *-ci*, which I assume to head an NP, following J.-S. Lee (1992). A verb nominalized by *-ci* cannot have a Tense feature even though it can have an AGR (honorific agreement) feature, as exemplified in (14).

- (14) Halmeni-kkeyse telebi-lul po-si (*-ess)-ci ani hay-ess-ta.
 grandmother-NOM+HON T.V.-ACC watch-HON (*-PAST)-CE not do-PAST-DECL
 'Grandmother did not watch the T.V.'

Therefore the main verb in the LNC cannot move to the Tense position without violating the Greed Principle, which states that one category cannot move solely in order to allow the features of another to be checked, even if this is the only way to produce a convergent derivation. A category can move only when it has a need to have some checking of its own features take place (Branigan 1992). Hence, what can move across NEG in the LNC is a dummy verb *ha* 'do' carrying a Tense feature. The Korean dummy verb *ha* is different from the English auxiliary *do* in that it is capable of assigning Accusative Case to the nominalized verb or adjective phrase.

Considering this, I suggest in agreement with Jung (1992) that it be base-generated. *Ha* overtly moves over NEG to the Tense position, as illustrated in (15), since the strong V-feature of Tense has to be checked off before SPELL-OUT to avoid derivational crash at the interface level LF (Chomsky 1993, 1994). The (honorific) agreement feature of the main verb is transferred to the dummy verb, together with Agent role since the dummy verb, which has no semantic content except for its original Case feature, is dependent on the main verb and the two verbs form a covert single complex predicate, as argued in Grimshaw & Mester (1988), S.-H. Ahn (1990), and J.-S. Lee (1992). The transferred agreement feature is checked against the V-feature of AGRs as the dummy verb adjoins to AGRs at LF. The Agent role transferred from the main verb to the dummy verb is assigned to the subject NP that occurs at SPEC of the dummy verb.³

- (15) [CP[AGR_{SP} [TP [NEGP [AGRoP[VP halmeni-kkeyse [NP [ACRP [VP telebi-lul t_i] po-si_i+AGR_i+ci] t_j] t_{AGRo}] ani] hay-ess_j+AGRo+T+AGRs+ta_k] t_k] 'Grandmother did not watch the T.V.'

The verb in the Korean SNC has a Tense feature and so it must move to the Tense position before SPELL-OUT so that its Tense feature can be checked against the strong V-feature of Tense, as illustrated in (16).

- (16) [CP[AGR_{SP} [TP [NEGP [AGRoP [VP halmeni-kkeyse telebi-lul t_i] t_{AGRo}] ani] po-si-ess_i+AGRo+T+AGRs+ta_j] t_j] 'Grandmother did not watch the T.V.'

Although the trace of AGRo is not antecedent-governed in either the LNC or the SNC, no ECP violation occurs, since the trace deletes at LF because it lacks the semantic content necessary for LF interpretation (Chomsky 1989, Watanabe 1993).

Therefore, we can conclude that verb movement in the Korean negation constructions is determined by a morphological property of the verb. That is, a verb with a Tense feature moves over NEG for checking off the strong V-feature of Tense; a verb with no Tense feature does not. This way, verb movement in the Korean negation constructions can be accounted for in terms of the Greed Principle in a simple and straightforward manner without assuming the dual nature of NEG or the dual strength (weak or strong) of the V-feature of AGR.

3.2. Case Marking

In the Korean LNC, a nominalized verb can have an Accusative Case marker but not a Nominative Case marker, whereas a nominalized adjective can have either an Accusative or a Nominative Case marker, as exemplified in (17).

- (17) a. Halmeni-kkeyse telebi-lul po-si -ci-lul/*ka ani
grandmother-NOM+HON T.V.-ACC watch-HON-CE-ACC/*NOM not
hay-ess -ta
do-PAST-DECL
'Grandmother did not watch the T.V.'

- b. Halmeni-kkeyse yeppe-si-ci-lul/ka ani hay-ess-ta.
 grandmother-NOM+HON pretty-HON-CE-ACC/NOM not do-PAST-DECL
 'Grandmother is not pretty'

To account for Case marking for the nominalized verb and nominalized adjective in the Korean LNC I suggest that the dummy verb *ha* 'do' in the Korean negation construction has an optional Accusative Case feature. This proposal is basically in agreement with J.-S. Lee's (1992). That is, *ha* can bear an Accusative Case or no Case feature. However, this assumption alone cannot account for why Case alternation does not occur in (17a), whereas it does in (17b). To solve this problem I propose that the dummy verb inherits the Case feature of the main verb before SPELL-OUT when it has no Case, since the dummy verb is dependent on the main verb and the two verbs form a covert single complex predicate (cf. Kang 1988, S.-H. Ahn 1990). If the dummy verb inherits the Accusative Case feature from a Case bearing verb as in (17a), the dummy verb will always bear [ACC], whether it originally bears [ACC] or not. In the meantime, if the dummy verb inherits no Accusative Case from the main predicate as in (17b), the dummy verb will have [ACC] or no Case feature, depending on whether it originally bears [ACC] or not. This is why Case alternation occurs in (17b), whereas it does not in (17a).

In (17a) Nominative Case for the nominalized verb phrase is impossible, since the dummy verb comes to bear [ACC] always after it inherits the Accusative Case feature from the main verb, whether it originally bears [ACC] or not. In this case only Accusative Case can be checked at SPEC of AGRO. Hence, the Nominative Case feature of the NP (nominalized verb phrase headed by a connective ending *-ci*), raised to SPEC of AGROp, conflicts with Accusative Case feature of the dummy verb adjoined to AGRO, resulting in derivational crash at LF.

- (18) [AGRsP[TP[NEGP[AGROp[NP ---po-si+ci-lul/*ka]_i [vp t_i t_j]] ani] hay-ess;
 +AGRO+T+AGRs+ta]]

However, in (17b), since the adjectival predicate does not have an Accusative Case feature, either Nominative or Accusative Case is possible for the nominalized adjectival phrase NP, since the dummy verb comes to bear either [ACC] or no Case feature, because it cannot inherit an Accusative Case feature from the main adjectival predicate, but it originally bears an optional Accusative Case feature--i.e. [ACC] or no Case. Therefore, Accusative Case can be checked at SPEC of AGROp when the dummy verb takes [ACC]. However, when the dummy verb has no Case feature, Case checking cannot occur at SPEC of AGROp. Therefore, if the NP with a Nominative Case feature raises to SPEC of AGROp, Case checking does not take place. Hence, it has to move to SPEC of AGRsP for Case checking and there its Nominative Case feature is properly checked and licensed by the N-feature (Nominative Case feature) of Tense adjoined to AGRs (cf. Chomsky 1993, 1994, Ura 1993).⁴

- (19) [AGRsP[TP[NEGP[AGROp[NP yeppe-si+ci-lul/ka]_i [vpt_i t_j]] ani] hay-ess;
 +AGRO+T+AGRs+ta]]

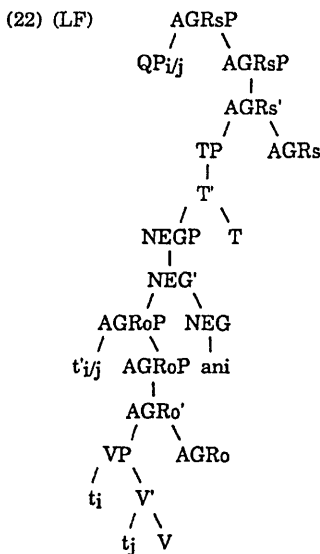
3.3. Interaction between NEG and QP

The ambiguity of Negation Constructions including a QP can be accounted for in terms of the Scope Principle (20) (Aoun & Li 1993) with a parametrization of the nature of a negation operator that a Korean negation operator, heading NEGP, is not an A'-operator (cf. K. R. Lee 1993), while an English negation operator is an A'-operator occupying SPEC of NEGP (Ouhalla 1990, Rizzi 1990, Aoun & Li 1993, Haegeman 1994)

- (20) The Scope Principle (Aoun & Li 1993:88):
An operator *a* may have scope over an operator *b* iff *a* c-commands *b* or an A'-element coindexed with *b*.

Let us consider how the above principle can account for the ambiguity of Korean Negation Constructions including NEG and quantifiers.

- (21) a. Motun salam-i sakwa-lul an mek-ess-ta.
all people-NOM apple-ACC not eat-PAST-DECL
'No one ate an apple.' 'Not all people ate an apple.'
b. Mary-ka motun sakwa-lul an mek-ess-ta.
-NOM all apples-ACC not eat-PAST-DECL
'Mary ate no apples.' 'Mary did not eat all apples.'



In (22) the subject and object QPs can adjoin to AGRoP and AGRsP, respectively at LF.⁵ In the LF configuration the QP c-commands NEG, and NEG c-commands the intermediate trace of the QP, which is in an A'-position.⁶ Therefore, both the QPs and NEG can have scope over each other, leading to the ambiguity of the sentences (21a) and (21b).

4. Conclusion

In this paper I took the view that NEGP is present in the Korean Negation Constructions, and I argued that the main verb in the SNC and the dummy verb in the LNC overtly move across NEG because they carry a Tense feature. They overtly raise to the Tense position to have their Tense features checked by the strong V-feature of Tense. The reason the main verb in the LNC does not move across NEG is that it doesn't have a Tense feature. Verb movement in the Korean Negation Constructions is determined by a morphological feature of the verb.

I suggested that the dummy verb has an optional Accusative Case feature and inherits the Case feature of the nominalized predicate. I showed that with this suggestion Case marking on the nominalized predicate in the LNC can be well accounted for.

This study shows that morphological features play an important role in syntactic phenomena like verb movement and Case marking.

NOTES

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The Yale Romanization system is used for the transcription of Korean. The following abbreviations for grammatical terms are used in this paper:

NOM: Nominative	ACC: Accusative	CE: Connective Ending
CONJ: Conjunction	DECL: Declarative	HON: Honorific
PAST: Past Tense	PRES: Present Tense	

¹ The distinction between 'strong' and 'weak' features of functional categories is language-particular and determined by theory-internal considerations. 'Strong' (Case or agreement) features are (Case or agreement) features which motivate overt syntactic movement of a verb or NP. 'Weak' (Case or agreement) features are (Case or agreement) features which do not motivate overt syntactic movement but covert LF movement. For instance, finite verbs in French have overt agreement features, whereas non-finite verbs do not. Hence, AGR of finite clause has a strong V-feature,

which motivates verb raising over NEG in the finite clause, whereas AGR of infinitival clause has a weak V-feature, which does not motivate verb raising over NEG in the infinitival clause.

2 Z is a potential antecedent governor for Y, Y in an X^0 chain, iff

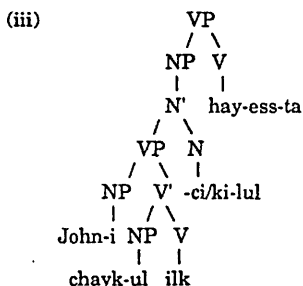
(i) Y is a lexical X^0 category and Z is a lexical X^0 category.

(ii) Y is a functional X^0 category and Z is a functional X^0 category.

3 If, following the VP-internal subject hypothesis, both the subject and object NPs occur inside the VP headed by the main verb, then both arguments can be assigned theta roles inside the projection of the theta role assigner. However, a problem arises, when the nominalized verb phrase moves to the front of the sentence leaving the subject NP if we consider it a syntactic movement.

- (i) ? [chayk-ul ilk-ci-lul]_i John-i t_i ani hay-ess-ta.
 book-ACC read-CE-ACC -NOM not do-PAST-DECL
 'Read the book, John did not.'
- (ii) [chayk-ul ilk-ki-lul]_i John-i t_i hay-ess-ta.
 book-ACC read-CE-ACC -NOM do-PAST-DECL
 'Read the book, John did.' (J.-S. Lee 1992:158)

The nominalized verb phrase NP cannot move without carrying the subject with it in the following configuration.



Therefore, it is impossible to derive sentences like (i) and (ii), if the subject is assumed to raise to SPEC of AGRsP at LF. Even if we assume that the subject overtly raises to SPEC of AGRsP, a problem arises. In that case the nominalized verb phrase should move to the front of the sentence, including the trace of the subject as in (iv).

- (iv) [NP t_i chayk-ul ilk-ci/ki-lul]_j [AGRsP John-i_i --- t_j]
 book-ACC read-CE-ACC -NOM

In the above configuration the trace of the subject NP is not bound by its antecedent, leading to a violation of the Proper Binding Principle (Fiengo 1977),

which states that a trace must be bound (cf. H.-D. Ahn 1991, J.-S. Lee 1992). Therefore, the sentences in (i) and (ii) are wrongly predicted to be ungrammatical.

The problem can be avoided if we posit the subject NP at the SPEC of the VP headed by the dummy verb outside the nominalized verb phrase NP, because the NP will not include the subject NP. Even though the subject NP occurs at the SPEC of the VP headed by the dummy verb outside the VP headed by the main verb, it does not violate the Theta Criterion, since it can receive the Agent role from the dummy verb after the thematic role is transferred from the main verb to the dummy verb, which is dependent on the main verb, as argued in Grimshaw & Mester (1988), S.-H. Ahn (1990), and J.-S. Lee (1992).

⁴ I assume that in Korean Tense bears a Nominative Case feature, in agreement with Jung (1992), and that the N-feature of Tense is weak, since the movement of the NP subject out of the original VP internal subject position is not visible as in English. Tense adjoins to AGRs to check the Nominative Case feature of a subject NP raised to SPEC of AGRsP at LF.

⁵ The QPs can adjoin to VP before adjoining to AGRsP, which does not affect our account.

⁶ Because the Korean negation operator is not a potential A'-binder, neither the Antecedent Requirement (MBR) nor the Locality Requirement is violated.

- (i) The Antecedent Requirement (The MBR): (Aoun & Li 1993: 186-187)
A variable must be bound by the most local potential antecedent.
- (ii) The Locality Requirement:
A variable, if it is subject to the Locality Requirement, must be bound by an A'-binder α within the minimal maximal category containing α and the variable.

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